



**Asia**  
Research Centre

**WORKING PAPERS**

---

# **Growth, Employment and Poverty Reduction: Post-Reform Indian Experience**

**Dr Himanshu**

C R Parekh Fellow

Asia Research Centre, LSE

# **Growth, Employment and Poverty Reduction: Post-Reform Indian Experience**

**Dr Himanshu**

Dr Himanshu was a visiting C R Parekh Fellow at the Asia Research Centre, LSE, in 2008 and is Assistant Professor of Economics at Centre for Studies in Regional Development, School of Social Sciences at Jawaharlal Nehru University, New Delhi, India.

Copyright © Himanshu 2008

All rights reserved. Apart from any fair dealing for the purpose of research or private study, or criticism or review, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission by the publisher of the author.

For further information, please contact:

Asia Research Centre (ARC)  
London School of Economics & Political Science  
Houghton Street  
London WC2A 2AE

[www.lse.ac.uk/asiaresearchcentre](http://www.lse.ac.uk/asiaresearchcentre)

E-mail: [Asia.Research.Centre@lse.ac.uk](mailto:Asia.Research.Centre@lse.ac.uk)

## **Growth, Employment and Poverty Reduction: Post-Reform Indian Experience.**

**Himanshu\***

### **Introduction**

Growth of Indian economy along with China has attracted global attention, especially in the recent period when most of the global giants such as United States are on the verge of recession. This attention is partially justified given the large size of the countries. However, the concerns which are shared at the domestic front are different from the concerns that the global community has for these countries. The recent emphasis on 'Harmonious Growth' by the Chinese Communist Party and 'Inclusive Growth' by the Indian Planning Commission raises the obvious question of how are the benefits of this growth shared among various population groups and spatially between states and provinces. Above all, the concern is more in the nature of the redistributive impact of the growth on the domestic economy and its ability to grow despite the bottlenecks imposed by constraints of a large and growing population, most of which is still dependent on agriculture for livelihood. Even though the challenges in both countries are similar, the modus operandi of tackling them is different, primarily because of the different nature of government in these countries but also because the engines of growth in these countries differ. While a large part of Chinese growth is centred on growth in manufacturing, particularly export oriented manufacturing industries; the growth in India is driven by the services sector. In the search for an effective way of achieving growth without compromising on the redistributive aspect of it has been employment and workforce structure. This is particularly true in a context when the growth of national income is accompanied by growing inequalities between various sectors of production, largely driven by the differential returns to labour in a segmented labour market. Nonetheless, characteristics of labour market and growth in employment remain an important tool for analysing the recent developments in India as well as China.

This paper analyses the recent patterns of growth in Indian economy and its impact on employment structures and poverty. The primary concern of the analysis is the question of redistributive impact of the growth in the recent period and to what extent changes in labour market and employment characteristics explain the poverty reduction seen in the last five years. Primary analysis based on the available data does suggest an increase in elasticity of growth on poverty reduction. However, such a conclusion is not entirely borne out by the indicators of employment which show a slowdown in wage rates for most of the workers in the economy. It appears *prima facie* a statistical artefact driven by

---

\* C R Parekh Fellow, Asia Research Centre, London School of Economics and Political Science. I would like to thank the ARC staff, in particular Ruth Kattumuri, Seetha Kakkoth and Shunji for all the help and support during my stay at ARC. Prashant Sharma of DESTIN was always available as a sounding board for many of the ideas developed in this paper. I would also like to thank Abhijit Sen for helpful comments and suggestions at various stages of revision of the paper.

the low inflation as seen in the official poverty lines. The analysis also suggests elements of distress so far as employment trends are concerned. Nonetheless, the paper also points to the seemingly innocuous but important characteristics of household demographics which show a beneficial improvement in total household earnings despite low wage rate growths. At the same time, it also highlights the important channel of employment diversification as means for achieving redistributive justice.

This paper is structured as follows: Section one of the paper looks at the recent trends in growth performance of Indian economy along with indicators of employment and poverty. Section two looks at the changes in labour market. This is done separately for rural farm and non-farm sector and urban areas. Finally section three puts together the recent evidence emerging from sectoral distribution of growth and employment to explain poverty reduction.

### **Recent Trends in Growth, Employment and Poverty**

Recent estimate of Gross Domestic Product (GDP) for the country suggests that the country's economy has grown by more than 9% per year during last year with the most recent quarter clocking growth rate of 9.4%. But behind this high rate of growth of economy is also the reality that this rate of growth of economy has been highly unequal so far as sectoral growth performances are concerned.

Table 1  
Growth Rate of National Income at constant prices (1999-00 series)

	<b>83-94</b>	<b>93-00</b>	<b>99-05</b>	<b>04-07</b>
Agriculture	3.76	3.31	1.59	4.34
Mining	6.44	5.20	4.67	4.37
Manufacturing	5.97	6.90	6.46	10.70
Electricity etc	9.43	6.98	4.14	6.35
Construction	5.43	6.36	8.79	12.45
Trade& hotels	6.12	9.29	8.05	10.55
Transport & communications	6.54	8.66	12.63	13.45
Real estate and business services	10.10	7.78	6.71	10.75
Community & personal services	6.25	7.83	5.22	7.78
Secondary	6.17	6.62	6.63	10.25
Tertiary	7.16	8.35	7.65	10.42
Total non-farm	6.79	7.74	7.31	10.36
Total GDP	5.78	6.51	5.99	9.17
Population	2.34	1.94	1.72	1.46
Per-capita GDP	3.36	4.48	4.20	7.60

Source: National Accounts Statistics, Central Statistical Organisation, Various Issues

Agriculture which still employs close to 50% of total population and almost two-third of rural population has seen growth rate decelerating to almost half the growth rate seen during 1993-99. Moreover, growth rates during 99-05 are lower than 93-99 for all sectors of the economy except for construction and communications. However, despite this, the total growth rate of GDP is only marginally lower during 1999-04. The weakening of impact of agricultural growth rate on total GDP growth is primarily a result of the falling share of agriculture in total GDP which fell from around 55% in 1950-51 to 37% in 1983-84 and around 20% in 2004-05. However, the share of agriculture in the workforce has fallen slower than the corresponding decline in GDP share and even today agriculture accounts for almost 50% of al the workforce. As a result, per worker productivity gap between agriculture and non-agriculture has increased sharply.

Further break-up of the agricultural sector shows up the following

CAGR of output in agriculture sector 1999-00 to 04-05

Agriculture (excluding livestock)	0.77%
Cereals	-1.34%
Pulses	-0.16%
Total food-grains	-1.20%

That is, food grains which account for more than 60% of the total area cultivated in the country have seen a negative rate of growth during 1999-2005.

Along with the GDP results, planning commission has also released the most recent estimates of poverty in the country. These are now available on mutually comparable Uniform Reference Period (URP) basis from the consumer expenditure survey and by Mixed Reference Period (MRP) from the Employment surveys based on abridged consumption schedule. These then show-up the following:

Table 2  
Poverty HCR (based on official poverty lines)

	Rural			Urban		
	CES		EUS	CES		EUS
	URP	MRP	MRP	URP	MRP	MRP
1983	45.7	41.8		40.8	37	
1987-88	39.1	34.9		38.2	34.8	
1993-94	37.3	31.6		32.4	27.9	
1999-00		27.1 (28.8)	34.0		23.6 (25.1)	28.9
2004-05	28.3	21.8	24.9	25.7	21.7	25.0

Note: Figures in parenthesis are food adjusted estimates reported in Sen-Himanshu (2004), CES: Consumption Expenditure Survey, EUS: Employment Unemployment Survey

Table 3  
Gini Coefficients for Rural and Urban Areas

	Rural			Urban		
	CES		EUS	CES		EUS
	URP	MRP	MRP	URP	MRP	MRP
1983	30.42	27.75		33.88	31.72	
1987-88	29.93	27.27		34.97	32.69	
1993-94	28.58	25.8		34.44	31.9	
1999-00		26.32	25.68		34.63	33.30
2004-05	30.45	28.08	26.96	37.64	36.43	38.34

Note: CES: Consumption Expenditure Survey, EUS: Employment Unemployment Survey

That is, inequality increased throughout the 1990s after falling during the 1980s in rural areas whereas it increased faster in the 1990s in urban areas with stagnant trend in the 1980s. But despite growth rates decelerating and inequality increasing to its highest levels since 1980s, the most recent period appears to be a period of high poverty reduction after a setback in the first 10 years of the reform process. The evidence so far suggests that the 1990s, whether defined as 1993-2000 or as 1987-2000, was indeed a period when poverty reduction suffered a setback. On the other hand, the period 1999-2005 appears to have seen significant poverty reduction.

Along with the poverty and inequality estimates, estimates on employment and unemployment are also available now. According to these, employment growth during 1999-2005 has not only outpaced the growth rate of working age population, at 2.85% per annum it also signals a reversal of the previous trend of 'jobless growth' during the 1990s which showed overall employment generation at around 1% per annum only. However, the results from the 61<sup>st</sup> round (2004-05) also suggest that the trend of increasing unemployment which picked up in the 1990s has continued and the unemployment rates in 2004-05 are among the highest since 1972-73, that is, since the beginning of the quinquennial employment and unemployment surveys of the National Sample Survey Organisation (NSSO). For the working population as a whole, daily status unemployment increased from 6.1% in 1993-94 to 7.3% in 1999-00 to 8.3% in 2004-05. Daily status unemployment among agricultural labour households (who are the poorest) increased from 9.5% in 1993-94 to 12.3% in 1999-00 and further to 15.3% in 2004-05. But more importantly, the results of the 2004-05 round also suggest certain changes in the structure of the workforce, which are not only contrary to the earlier trend seen during the last three decades, they also suggest some deeper changes in the labour market behaviour which need to be examined in detail. For example, the share of casual labourers in general (and agricultural wage workers in particular) actually declined during 1999-2005 after a sharp increase during 1993-2000 and earlier and also rural non-agricultural

employment registered a sharp increase from 1999-2000, following almost complete stagnancy earlier in the 1990s.

Table 4  
Employment Growth Rates

	1993-94 to 1999-00	1999-00 to 2004-05	1993-94 to 2004-05
Agricultural Self Employment	-0.53	2.89	1.01
Agricultural Wage Employment	1.06	-3.18	-0.89
Total agricultural employment	0.03	0.85	0.40
Agricultural GDP	2.88	1.76	2.37
Non-agricultural Self employment	2.34	5.72	3.86
Non-agricultural Wage employment	2.68	3.79	3.18
Rural non-agricultural employment	2.26	5.27	3.52
Urban non-agricultural employment	3.13	4.08	3.46
Secondary sector employment	2.91	4.64	3.70
Tertiary sector employment	2.27	4.67	3.35
Total non-agricultural employment	2.53	4.66	3.49
Non-agricultural GDP	8.11	7.22	7.71
Total Employment	1.02	2.85	1.85

Source: Based on employment estimates from NSSO EUS

The unexpectedly high growth of employment coming after a period of jobless growth has not gone down well with many. This is partly due to the stories of rural and agrarian distress coming from the rural areas for the same period, which do not share the same dynamism as is coming out from the employment growth. This disjunction between growth and employment has also led some researchers to question these results and term them as statistical facts (Unni and Raveendran, 2007; Sundaram, 2007). Critiques of the jobless growth theory have also bounced back with arguments for doing away with NREGA, essentially seen as a response to jobless growth (Sunil Jain, 2006). However, other serious researchers have taken this spurt in employment growth with a pinch of salt and have argued for looking closely at the quality of new jobs created. The preliminary evidence on this suggests a worsening of quality of employment with employment swelling in the informal sector, mostly as self-employed. Nonetheless, these results at first sight appear to defy the conventional wisdom, so far as employment trends are concerned, given the large scale rural distress during the same period.

However, matters are complicated by the fact that this surge in employment growth after 1999 was accompanied not by higher growth in wage rates but by their stagnation. Tables below summarise all-India trends in wages at constant 1999-00 prices. From these tables, the trend is not only of clear deceleration in real wages of casual workers, there is even more deceleration in wages of regular workers in both rural and urban areas. That is, real

wages decelerated for all workers significantly during 1999-00 to 2004-05 compared to wage growth between 1993-94 and 1999-00. And this was true for rural and urban, agriculture and non-agriculture, male and female and at all levels of education. If wages are taken to be the main indicator of well being and poverty then poverty reduction should have been less between 1999-00 and 2004-05 compared to the previous period, a trend contradictory to the poverty estimates reported above.

Table 5

Growth rate of real wages (1999-00 prices) for casual workers of age 15-59				
	1993-94 to 1999-00		1999-00 to 2004-05	
	Agriculture	Non-agriculture	Agriculture	Non-agriculture
Male	2.80	3.67	1.38	0.67
Female	2.95	5.13	1.04	1.51
Persons	2.78	4.19	1.31	0.76

Source: Computed from NSSO employment-unemployment surveys

Table 6

Growth rate of real wages of regular workers by education status				
	Rural		Urban	
	1993-94 to 1999-00	1999-00 to 2004-05	1993-94 to 1999-00	1999-00 to 2004-05
Not literate	6.18	-1.67	2.63	-1.00
Primary	3.88	-0.57	3.42	-2.20
Secondary	4.33	-0.72	4.37	-1.74
Graduates	6.04	2.00	5.27	1.91
All	5.38	0.56	5.01	0.21

Source: Computed from NSSO employment-unemployment surveys

### **Agrarian Crisis and Agricultural employment**

Things could not have been worse for the agrarian sector of the economy with GDP in agriculture decelerating sharply along with deceleration in agricultural wages thus hurting both, cultivators as well as the more vulnerable agricultural labour households. The enormity of the crisis in Indian agriculture is perhaps understated by the thousands of suicides by farmers in different regions of the country. While they do seem to have attracted attention of the mainstream media partially to the crisis in farming, many such stories of agrarian distress go unnoticed in other parts of the country. Almost 40% of farmer households (more than 50% in case of small and marginal farmers) according to the 59<sup>th</sup> round of NSS survey (2003), confessed to their disillusionment from farming. And of these 40%, an overwhelming 87% of farmers reported that this was because farming was not profitable and was too risky. Falling profitability in agriculture has also forced a significant majority of farmers in debt trap with 49% of farmer households (82% in Andhra Pradesh and 75% in Tamil Nadu) reporting themselves to be indebted.



What is also important to note is the fact that, the crisis in Indian agriculture has been brewing up ever since 1996-97 and has only worsened in the recent period. Growth rate of crop output has come down from 3.1% per annum during 1980-1997 to around 1% per annum thereafter. Of this, excluding the fruits, vegetables and condiments and spices sub-group, the growth rate of remaining crops has been less than 0.5% per annum compared to over 3% before 1997. This was accompanied by deceleration in input use, coinciding with the period after 1997-98 when output prices began to fall relative to input prices. While a part of the deceleration in agricultural growth can be attributed to lower profitability leading to slower increase in input used, it was also accompanied by decline in input productivity from about 1% per annum prior to 1996-97 to negligible thereafter.

The deceleration was seen across all crops and sectors and the magnitude of deceleration was significant enough to leave per capita output at lower levels than 1996-97 even in the year 2003-04 which was incidentally a year of excellent monsoon and record production. Since the deceleration coincided with a downturn in world prices, the impact on domestic farm incomes was more than in earlier decades because of greater openness. Consequently, farm incomes became more variable and decelerated more than output in many cases. The net impact of all these was a severe crisis for the farming community.

However, this period of agrarian crisis is also accompanied by certain changes in the labour market which suggest that this period of agrarian crisis has also seen the highest rate of growth of labour force and workforce. All these developments in the agrarian sector and wage labour market do not suggest any possibility of employment availability increasing due to pull factors originating in agriculture. In this context, following issues need explanation: (1) why did self-employment as share of workers increase when the trend in the past has that been of decline in self-employment, (2) why does casual wage-employment decline when there is sharp deceleration in wages during this period, and (3) why does average consumption expenditure increase and poverty decline faster during this period when wages are showing sharp deceleration. The last point is particularly important, since wages have often been used as a strong proxy for consumption expenditure or income of the poor and past experience suggests that the growth rate of wages is strongly correlated to growth rate of consumption expenditure and reduction of poverty.

### **Rural Farm Employment**

For agricultural employment in rural areas, self-employment and wage labour are the dominant form of employment with very little regular employment. This is particularly true for females. Over the years, self-employed workers as percentage of total workers was coming down and this trend is consistently true for all the previous rounds since

1972-73. This is also along expected lines and the main reason was the much higher dependence on agriculture as source of livelihood for rural population. Since, land is limited, with increasing population pressure and land fragmentation, the share of self-employed in the total rural agricultural workforce was bound to decline and some of the households where the income from cultivation falls over the years would move to casual wage-employment to supplement household income. This particular effect would tend to weaken over time as non-farm diversification of employment increases over time and some of the households would also seek employment in non-agricultural sector where this can take up the form of self-employment. But most certainly, increase in self-employment in agriculture would not be expected unless there is increased access to land. For most of the rural labour accounting for nearly one third of all households in rural areas in 1999-00, the possibility of increased access to land is ruled out. The agrarian crisis following 1999-2000, apart from showing deceleration in output growth has also shown signs of increasing input costs and declining profitability in agriculture. In that context, increased absorption of labour force in agriculture as self-employed is not a possible option.

Table below gives the number of workers by status of employment and industrial affiliation for the last three rounds in rural areas.

Table 7  
Number of usual status workers (in millions)

	Rural Male			Rural Female		
	1993-94	1999-00	2004-05	1993-94	1999-00	2004-05
Self-employed in agriculture	85.0	83.1	92.8	52.9	51.0	66.6
Self-employed in non-farm	23.2	26.0	34.4	8.5	9.6	12.4
Regular in agriculture	2.5	2.5	1.9	0.5	0.6	0.5
Regular in non-farm	13.4	15.1	17.7	2.3	2.6	4.1
Casual in agriculture	51.6	56.2	50.8	36.9	38.6	36.2
Casual in non-farm	12.1	15.7	21.2	3.7	3.2	4.3

The interesting aspect of this table is that the trends are same between 1993-94 and 2004-05 for non-farm employment. In fact, casual employment has increased in non-farm at a much faster rate than in the previous period for both males and females. This is also true for regular employment. Taking both regular and casual employment together in the non-farm sector, the rate of growth of labour force implied is not much different between these two periods. However, the major difference between the two sub-periods is in the case of self-employed which has increased faster for non-farm employment for both males and females. At the same time, while self-employment in agriculture was declining between 1993-94 and 1999-00, it shows a sharp increase between 1999-00 and 2004-05. The other trend which departs from the usual trend is the decline in absolute number of casual workers in agriculture. In fact, more than 90% of the incremental workforce in the

case of rural females is employed in self-employment in agriculture. It is also noteworthy that females account for more than 60% of total increase in self-employed in agriculture while males account for almost 75% of the entire increase in self-employed in non-agriculture.

As far as agricultural sector is concerned, the impact of agrarian crisis has been felt by all class of households but more so by the cultivators especially the middle and small peasants but also the large landowners. The partial literature available on the agrarian crisis also suggests that the class of households which has been affected largely is the middle and large landowners. For the marginal and tiny land holding households, agriculture is mostly subsistence with very little marketed. For the landless, engaging in agriculture is mostly as agricultural labourers. One possible strategy adopted by the cultivator households in the face of increasing cost of cultivation and falling agricultural product prices is to cut back on hired labour. This strategy is not only employed by the large farmers but also by middle farmers, for whom the cost of hired labour could be a significant share in the total cost of cultivation. On the other hand, some of these families would also tend to substitute these with aggressively employing the family labour in cultivation to step up production from agriculture per se. The large farmers on the other hand would also take recourse to mechanisation which also appears to be gaining ground in most states. The tendency to cut back on hired labour would also imply a decline in demand for wage labour particularly in agriculture. This would then also imply a pressure to hold up any increase in wage rates. This would then be consistent with the trend emerging from 61<sup>st</sup> round, that is, wage labour declines and self-employment increases particularly for females and elderly. This is also accompanied by a deceleration in wage rate growth. Moreover, the need to supplement household income by increasing labour force participation from the household will also translate into more women and other members from the household joining the labour force. Distribution of persons of age 15 and above by household and MPCE fractile group suggests such a process happening during 1999-2005. The percentage of households with single male earning member decreases during this period and is accompanied by increase in households with multiple members working. The situation during 1993-2000 was reverse of this trend.

For the landless and tiny cultivators, the option of indulging in self-employment in agricultural is limited. For them, it will either be acceptance to work at lower wages or move into non-agriculture either as self-employed or as wage employee. The movement into non-agriculture would then show up as increased non-farm diversification, which is also borne out by facts from the 2004-05 survey. But again, the option to engage in non-farm employment as regular and casual workers is limited and dependent on non-farm enterprises and activities willing to hire them. A large set of these pushed out workers from agriculture would then move into non-farm employment as self-employed workers.

But a large part of this non-farm diversification would be in petty jobs such as construction, retail trade such as street vending, that is, informal sector employment. In that case, it will also be accompanied by increasing unemployment since the move towards non-farm is driven by distress. In fact, the previous literature on non-farm employment has shown non-farm diversification to correlate very well with unemployment rates during distress and such non-farm employment was considered a sign of distress diversification. This also appears to be the case during 1999-2005 with unemployment rates increasing compared to the previous period, and this is highest ever seen in the last thirty years for the agricultural labour households who are the most vulnerable. This increase will also be reflected more for the supplementary workforce such as women, children and elderly who are moving into the labour force in search of job. The evidence from the 61<sup>st</sup> round (2004-05) suggests this to be happening and unemployment rates are increasing for females, elderly and children in rural areas. On the other hand, for males there is no such increase observed except in daily status unemployment rates. In fact, except for daily status estimates, unemployment rates for males in rural areas do not show any increase. Unemployment rates for males by usual status and weekly status actually declines between 1999-00 and 2004-05. In other words, the most recent period appears to be the classic example of feminisation of workforce with females moving into self-employment in low-productivity agriculture while the males move to non-farm employment outside the home boundary. A clear sign of distress is also the fact that males ensure some employment and hence their unemployment rates decline while females look for alternative income and employment to supplement household income.

The surveys also suggest that the increase in multiple member working households is happening across all classes of households. This is further supported by looking at some indicators by size class of land owned for rural areas. The first set of indicators in this regard is the work participation rate for males and females by size class of land owned.

Table 8  
Work Participation rate by size class of land owned

Land owned (in Hectares)	1993-94			1999-00			2004-05		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Landless	53.3	32.1	42.9	50.9	28.0	39.9	56.2	22.3	40.5
0.01 to 0.40	53.8	31.2	42.7	51.7	28.1	40.0	53.2	25.5	39.5
0.41 to 1.00	56.2	34.2	45.6	54.0	30.7	42.7	55.5	33.9	45.0
1.01 to 2.00	56.2	32.7	45.0	55.7	32.2	44.3	57.1	35.0	46.3
2.01 to 4.00	57.5	34.5	46.6	55.6	32.8	44.6	56.5	36.4	47.0
4.00 and above	57.6	35.7	47.2	55.5	32.1	44.2	57.5	36.3	47.3

Source: Computed from unit record data of NSSO

According to distribution of WPR by size class of land owned, male WPR as well as female WPR was coming down in all size class of households during 1993-2000. This trend is reversed for all size class of males during 1999-2005, but inversely related to size class of land owned. For females, however, the trend continues for the land less as well as tiny land holding class but is reversed for more than 0.41 hectare (1 acre) class with faster increase for the higher land size class. Quite understandably, there is very little to add from the family reserve labour force when the land size owned is less than 1 acre. While for the higher land size class, women can comfortably be moved into agricultural work on self-farms while the men move into non-farm employment. The second set of indicators is the distribution of the workers by industrial affiliation.

Table 9  
Percentage of workers employed in agriculture

Land owned (in Hectares)	1993-94		1999-00		2004-05	
	Male	Female	Male	Female	Male	Female
Landless	55.1	75.5	50.5	74.2	37.6	62.8
0.01 to 0.40	59.9	77.3	60.2	79.2	53.5	75.0
0.41 to 1.00	80.6	90.3	80.9	91.1	76.1	89.9
1.01 to 2.00	86.7	93.8	86.2	93.7	83.7	93.3
2.01 to 4.00	89.8	95.9	88.2	96.2	86.7	95.0
4.00 and above	90.8	96.4	89.8	96.6	87.2	95.7

Source: Computed from unit record data of NSSO

The percentage of workers in agriculture declined between 1993-94 and 1999-00 for the landless households as well as households with land holding above 1 hectare. For the households with tiny and marginal holdings there was actually an increase in percentage of workers in agricultural employment. The period between 1999-00 and 2004-05 saw the same trend continue for the 1 hectare and above land owning households with slow shift towards non-farm employment. But the decline in agricultural employment for the landless in this period was much faster than the previous period. At the same time, the tiny and marginal land owning class (less than 1 hectare) which did not witness any non-farm diversification in the previous period also saw significant non-farm diversification during this period. These land owning classes which comprise almost 50% of the total households were the ones which saw a mass exodus out of agriculture because agriculture was no more a viable source of livelihood. Finally, the last set of indicators by size of land owned is the distribution of workers by status of employment.

Table 10  
Percentage of workers self-employed

Land owned	1993-94		1999-00		2004-05	
(in Hectares)	Male	Female	Male	Female	Male	Female
Landless	22.9	19.4	24.3	22.8	27.1	35.3
0.01 to 0.40	33.8	38.8	34.6	40.3	38.3	45.2
0.41 to 1.00	65.9	65.7	67.1	65.2	70.6	73.2
1.01 to 2.00	81.1	79.8	81.5	79.7	82.7	84.6
2.01 to 4.00	88.7	89.9	88.5	89.9	89.5	91.9
4.00 and above	92.3	95.6	92.1	96.2	90.7	96.1

Source: Computed from unit record data of NSSO

Here again movement into self-employment has been steady and gradual for males during 1993-94 to 2004-05 with no major change between the two periods. But for females, the move into self-employment has increased considerably during the later period. This is particularly true for the land owning class less than 1.00 hectares. For the highest land owning class self-employment has tended to decline with a minor increase in regular employment and that trend is consistent between the two periods.

### **Rural Non-farm employment**

As has been shown earlier, bulk of the decline in agricultural employment and increase in non-farm employment is due to the exit of the workers in households owning less than 1 hectare of land. Prima facie, this again appears to be driven by distress since these households have very little access to capital or credit to engage in productive non-farm enterprises. A break-up of the non-farm employment in principal status by two digit industry classifications shows that, of the entire increase in non-farm employment in rural areas of 16 million by principal status, nearly 50% (8 million) was in the form of self-employment, 5 million as casual employment and remaining 3 million as regular employment. Major part of the increase is accounted for by manufacturing (3.5 million), trade and hotels (4 million), transport and communications (1.8 million) and construction (5 million). As far as casual employment increase of 5 million is concerned, this is almost entirely due to the 5 million increases in casual employment in construction after netting out changes in other industry groups. Casual employment in other services declined by almost 0.89 million but was compensated by an equivalent increase in manufacturing (0.65 million) and mining (0.24 million). Within mining it is clearly the stone quarrying and other small mining activities. Within manufacturing again, a large part was increase in industry code 26 (manufacture of other non-metallic products, mainly brick kiln).

Of the three million increase in regular employment, trade and hotels accounted for 0.96 million, manufacturing 0.67 million, transport and communications 0.53 million and

personal services accounted for 0.5 million. Within manufacturing, almost a third of the increase in regular employment was contributed by industry code 16 (manufacture of tobacco products). Almost two third of the increase in trade and hotels was accounted for by retail trade and repair group (industry code 52). Similarly, in the transport and communications sub-group, almost 90% of the increase in regular employment was in industry code 60 (Land transport), most probably as drivers, conductors and so on. Finally, within personal services group, more than 90% of the increase is attributable to three industry groups, education (code 80), health and social work (code 85) and private households with employed persons (95). This is despite the fact that public administration and defence shed almost a million jobs during the same period.

However, the largest increase among rural non-farm employment is due to the increase in self-employed. Of the entire increase in self-employed non-farm employees, almost 60% is accounted for by three industry groups; namely, manufacture of wearing apparel (1.5 million), retail trade (2.2 million) and land transport (1 million). Another 25% is accounted by activity codes 20, 36, 51, 55, 64, 80 and 85. Activity codes 64 is the post and communications industry groups, where the bulk of increase in self-employed has been in the form of STD/PCO booths. 51 is maintenance and repair of motor vehicles and 55 is hotels and restaurants. These industry codes together account for 85% of all the increase in self-employed in non-farm in rural areas.

Further break-up of the non-farm sector workers also confirms greater informalisation of workforce during 1999-2005. Table below presents the percentage of informal sector workers among total workers in non-farm sector by status of employment. Table below presents the percentage share of informal sector workers by disaggregated industry type for rural areas. The striking point from this table is the fact that informalisation of workforce is happening for all status of employment, but at a greater pace for males than females. What is also obvious is that the so-called self-employed in non-farm sector is almost entirely informal sector employment and this has increased from 91 % in 1999-00 to 95.4% in 2004-05. Almost 97% of all female workers self-employed in non-farm sector are in informal sector.

Table 11  
Usual status non-farm workers in informal sector in rural areas

	1999-00			2004-05		
	Male	Female	Persons	Male	Female	Persons
Percentage of total usual status non-farm workers						
Self-employed	90.7	92.1	91.1	95.0	96.6	95.4
Regular	33.6	28.4	32.8	44.0	25.8	40.5
Casual	69.8	63.7	68.7	80.5	73.8	79.4
Total	69.5	75.0	70.7	78.1	77.1	77.9
Absolute number of informal non-farm sector workers (in millions)						
Self-employed	23.6	8.8	32.4	32.7	12.0	44.6
Regular	5.1	0.7	5.8	7.8	1.1	8.8
Casual	11.0	2.0	13.0	17.1	3.2	20.2
Total	39.5	11.6	51.0	57.2	16.0	73.3

Moreover, the pace of informalisation of workforce has been very fast for regular employment also, particularly for rural males, although it has declined for rural females. It is also very clear that the net increase in informal sector workers has been larger than the total increase in non-farm workers by each activity status, except for rural females in regular employment. That is, the increase during 1999-05 is entirely in the informal sector as far as non-farm employment is concerned. At the same time, of the workers in the non-farm sector in 1999-00, some have moved away from the formal sector to informal sector during this period.

Table below also confirms that the pace of informalisation has been greatest in those industry groups which have seen the highest increase in workforce between 1999-00 and 2004-05. By 2004-05, 94% of all workers in trade and repair and hotels industry group are informal sector workers. Other industry groups which have seen high rate of informalisation are manufacturing and community and social services. In almost all industry groups, the rate of informalisation has been faster for males than for females. The story by industry group also confirms the trend seen in the distribution of rural non-farm workers by formal and informal categorisation. More than the net increase employment in manufacturing, retail trade, hotels, transport and communications is the increase in informal sector workers in these industry groups. That is, apart from the incremental workforce entirely being absorbed in informal sector, even the existing workers in 1999-00 in these sectors are moving away from formal employment to informal sector employment. Further evidence on nature of job contracts, availability of paid leave and social security benefits also suggests that the growth of non-farm employment in rural areas is primarily an effect of distress employment with employment quality deteriorating in almost all categories of workers.



Table 12

Percentage of informal sector workers among usual status non-farm workers (rural)

	1999-00			2004-05		
	Male	Female	Persons	Male	Female	Persons
Mining	65.6	73.2	67.2	71.9	79.8	73.6
Manufacturing	78.7	87.6	81.9	85.9	91.6	88.1
Electricity, Gas & Water Supply	9.3	2.5	9.2	8.7	11.2	8.8
Construction	69.7	51.9	67.7	80.0	71.8	79.1
Trade and Repair	89.0	89.6	89.1	93.7	95.7	93.9
Hotels and Restaurants	86.7	87.8	87.0	94.0	93.3	93.9
Transport & Communications	71.7	51.4	71.5	83.0	67.1	82.6
Financial Intermediation	23.8	29.1	24.3	28.4	48.6	30.2
Real Estate and Business	75.3	67.5	75.0	86.9	78.5	86.4
Education	18.7	24.8	20.4	26.7	28.5	27.4
Health and Social Work	53.1	18.3	42.0	60.1	36.4	52.0
Community, Social & Personal	74.1	78.1	75.3	85.3	93.2	87.0
Total	69.5	75.0	70.7	78.1	77.1	77.9

**Urban Employment**

The story in urban India is also similar with much of the growth being accounted for by self-employed for both males and females. Absolute number of workers in urban areas by industry and status of employment is given below.

Table 13

Number of workers by usual status (in millions)

	Urban Male			Urban Female		
	1993-94	1999-00	2004-05	1993-94	1999-00	2004-05
By Industry						
agriculture	5.8	5.0	5.5	4.3	3.2	4.5
Mining	0.8	0.7	0.8	0.1	0.1	0.0
manufacturing	15.2	16.9	21.2	4.1	4.4	6.9
electricity, water	0.8	0.6	0.7	0.1	0.0	0.0
construction	4.5	6.6	8.3	0.7	0.9	0.9
trade, hotel	14.1	22.2	25.3	1.7	3.1	3.0
transport, storage	6.3	7.8	9.7	0.2	0.3	0.3
other services	17.0	15.8	18.8	6.0	6.2	8.8
total non-farm	58.7	70.6	84.9	13.0	15.0	20.2
By status of employment						
Self-employed	26.9	31.3	40.5	7.9	8.2	11.7
Regular	27.1	31.4	36.7	4.9	6.1	8.8
Casual	10.5	12.7	13.2	4.4	3.9	4.1
Total	64.6	75.4	90.4	17.2	18.2	24.6

As is clear from the table, most of the increase for both males and females is in the form of self-employment. But again similar to the case in rural areas, bulk of this employment is in informal sector and the pace of informalisation seems to have increased between 1999-00 and 2004-05 for both males and females in urban areas.

Table 14  
Usual status non-farm workers in informal sector in urban areas

	1999-00			2004-05		
	Male	Female	Persons	Male	Female	Persons
Percentage of total usual status non-farm workers						
Self-employed	95.1	92.8	94.7	97.3	96.8	97.2
Regular	40.2	40.8	40.3	46.5	27.8	42.9
Casual	74.0	72.1	73.7	85.2	68.9	82.3
Total	67.5	68.7	67.7	73.7	63.5	71.7
Absolute number of informal non-farm sector workers (in millions)						
Self-employed	29.8	7.7	37.4	39.4	11.4	50.8
Regular	12.6	2.5	15.1	17.1	2.4	19.5
Casual	9.4	2.8	12.2	11.2	2.8	14.1
Total	51.8	12.9	64.7	67.7	16.6	84.4

Table 15  
Percentage of informal sector workers among usual status non-farm workers (urban)

	1999-00			2004-05		
	Male	Female	Persons	Male	Female	Persons
Mining	26.6	40	27.8	24.7	43	25.7
Manufacturing	69.8	85.9	73.2	77.9	90.4	81
Electricity, Gas & Water Supply	6	4.1	5.9	9.4	1.1	8.8
Construction	75.3	63.6	73.9	87	88.7	87.2
Trade and Repair	89.2	84.4	88.6	95.2	92.2	94.9
Hotels and Restaurants	89.9	89.6	89.9	94.1	96.4	94.5
Transport & Communications	65.7	41.9	64.7	73.6	48.3	72.8
Financial Intermediation	21.8	18.1	21.2	28.8	17.8	27
Real Estate and Business	79.7	73.5	79.1	77.6	64.3	76.1
Education	32.4	38.9	35.5	32.3	41.2	36.6
Health and Social Work	45.2	34.8	41.2	54.4	42.3	49.5
Community, Social & Personal	74.5	79.8	76.4	81.4	89.6	83.4
Total	67.4	68.5	67.6	73.7	63.5	71.7

Similar to what was seen in the case of rural workers, percentage of informal sector workers have increased in urban areas also except for regular female workers. Also, percentage of informal sector workers in urban areas is higher than in rural areas. 97% of males and females in urban areas employed as self-employed are in informal sector. Moreover, the growth of informal sector workers for urban males accounts for more than the entire increase in urban male workforce. That is, similar to their rural counterparts, not only is the entire increase in urban workforce in informal sector; it also appears that some formal sector workers in 1999-00 have now moved into informal sector. On the other hand, for females, the increase in informal sector workers is mainly in the self-employed category. Similar trend is observed by looking at the percentage of informal sector workers by industry division.

That is, informalisation has increased for almost all industry groups except for mining and real estate and business. Secondly, in trade and repair and hotels and restaurants category which employs bulk of the urban workers, 95% of all workers are now in informal sector compared to less than 90% in 1999-00. The pace of informalisation has been very high for manufacturing, construction transport and communications and community social and personal services other than the two mentioned above. This industry groups together account for more than 95% of all urban non-farm workers.

### **Employment and Earnings from Other Sources**

Employment in factory sector in rural areas is now available from Annual Survey of Industries (ASI) for 2004-05. Since 1999-00, NSSO has also attempted to include some aspects of employment in its questionnaire. These questions are available on type of enterprise, number of workers in enterprise and whether the enterprise uses electricity or not along with other questions on nature of job contract and availability of paid leave and social security. Using these tabulations from the NSSO, it is possible to do a cross-check on ASI data which is also available by rural urban break-up. Some of the findings from the ASI for 1999-00 and 2004-05 are reported below.

Table 16  
ASI estimate of Factory Sector

	1999-00	2004-05	1999-00	2004-05	Change (1999-05)	
	Rural		Urban		Rural	Urban
Factories	46043	53123	85516	83230	7080	-2286
Workers (in '000)	2350.0	2716.3	3930616	3882956	366.3	-47660
Total Persons Engaged (in '000)	2999.5	3417.5	5173333	5036110	418.0	-137223
Daily wage (in Rs)	100.4	117.6	135.9	155.0	17.2	19.16
NVA/Worker (in Lakh)	2.5	4.0	2.5	3.9	1.5	1.42

ASI estimates are for factory sector which is defined as enterprises with more than 10 workers with electricity and more than 20 workers with or without electricity. Using the same criterion, the number of regular workers by NSS for 1999-00 is 1.96 million and 2.35 million for 2004-05. The net increase in workers by NSS is 393 thousand as compared to 366.3 thousand in ASI. There is also close similarity between the wage estimates reported by NSS for regular workers and ASI for both these years. In other words, despite NVA/worker increasing substantially, in real terms wages of regular workers in these industries has declined. These figures also confirm the fact that, of the 0.7 million increases in regular employment in industries of the ASI sector, almost half of them are not in factory sector but are in enterprises of less than 10 employees or in informal sector.

However, the picture in the urban sector is different with not only the total number of factories declining but also the number of workers declining between 1999-00 and 2004-05. At the same time, the rate of growth of rural wages is also higher than the rate of growth of urban wages. However, this is not confirmed by the NSS estimates which suggest that workers in factory sector using ASI definition increased by around 1.9 million during 1999-00 and 2004-05. On the other hand, wages rate from NSS do confirm that rural wages have grown faster than urban wages, even though both have seen sharp deceleration.

ASI data also shows that the growth rate of wages is almost similar to what is seen from the NSS, despite the fact that NVA per workers has increased substantially in both rural and urban areas. Further disaggregation also shows that this has also accompanied by an increasing share of managerial compensations and profits as ratio of net value added. Profits as percentage of net value added increased from 23% in 1981-82 to around 31-32% for most of the 1990s, but jumped substantially to more than 56% by 2004-05.

Table 16  
Nominal wages from ASI

	Wages per worker	Managerial emoluments	Wages per manday worked	Wages/NVA	Profits/NVA
1981-82	19.72	39.05	26.06	0.47	0.23
1993-94	72.69	145.76	86.03	0.32	0.32
1999-00	114.74	311.87	138.15	0.31	0.31
2004-05	139.64	472.56	168.58	0.25	0.56

This pattern of employment is also confirmed more or less by the recent estimates of Economic census. According to these,

Table 17  
Employment Characteristics from Economic Census

	EC2005			EC1998		
	Rural	Urban	Total	Rural	Urban	Total
Number of enterprises	25.8	16.3	42.1	17.7	12.6	30.4
% share	61.3	38.7	100	58.3	41.7	100
Employment	50.2	48.8	99.0	39.9	43.4	83.3
% share	50.7	49.3	100	47.9	52.1	100

That is, enterprises grew by 5.53% in rural areas and 3.71% in urban areas while employment grew by 3.33% in rural areas and 1.68% in urban areas. By 2005, share of rural areas in enterprises had also grown along with share in total employment. Estimates of organised employment from DGET on the other hand suggest that total organised employment has continued to decline over the period 1999-2005. This is in fact very similar to estimates obtained from the NSSO which again suggest decline in formal sector employment, at least in rural areas. Some basic estimates from the DGET data is provided below.

Table 18  
DGET estimates of Employment (in millions)

		1999	2005
Public		19.36	18.00
Private		8.73	8.45
	Larger establishments	7.79	7.49
	smaller establishments	0.94	0.96
Agriculture		1.39	1.48
mining		1.01	1.09
Manufacturing		6.74	5.62
electricity		1.00	0.9
Construction		1.18	0.96
trade and hotels		0.49	0.56
transport and communications		3.1	2.84
real estate and business		1.66	1.93
community social and personal		11.5	11.07
Total		28.09	26.46
Number of establishments			
Public		169971	172337
Private		114998	121430
	Larger establishments	54122	55079
	Smaller establishments	60876	66351

While total organised employment has declined by 1.63 million during this period, the decline in secondary and tertiary sectors has been greater with total employment in agriculture and mining increasing during the same period. Employment in organised sector has declined all industrial categories except for trade and hotels and real estate and business. The data also shows that the decline is not restricted to public sector alone but also in private sector. This is despite the fact that the smaller establishments in the private sector have added some workers. Moreover, during the same period, number of establishments increased in public sector as well as private sector, particularly the larger establishments. That is, the decline in total organised employment is not due to decline in number of establishments but is mainly a result of existing establishments shedding workforce.

To summarise the employment trends in the 1990s and beyond:

The most recent period has been characterised by a significant increase in employment in both rural areas as well as urban areas. While most of this employment clearly has been in informal sector and as self-employed with organised sector losing workforce, this is also characterised by growth in low productivity industries with very little growth of wages. Thus, there is no doubt that most of this increase has been as distress employment. However, it is also clear from the previous analysis that the growth in workforce has primarily been led by rural non-farm sector which has not only outpaced the growth rate of enterprises in urban areas but also employment. This has come despite wages not growing faster than in the first decade of the reforms is obviously an indicator of the worsening of the quality of employment in the most recent period. However, the growth of employment has been entirely in the unorganised or informal sector does raise the obvious questions of limits to such employment growth as well as its effect on productivity in this sector. Nevertheless, there is the obvious message to the votaries of labour laws reform implicit in this. And that is, very clearly that employment growth is not constrained by rising wages in the organised sector or by rigid labour laws not allowing hiring and firing of workers in the organised sector. That fact that the organised sector has been able to reduce workforce by almost 2 million during the same period despite the number of enterprises growing suggests that the problem lies elsewhere.

Nonetheless, this period also shows that even though quality of employment has not improved, poverty has declined in both rural and urban areas, although faster in rural areas. Then, the only way of reconciling such contradictory trends on wages and poverty, both from the same EUS data, is to concentrate on the poorest workers and on the regional picture. In the previous literature on poverty, it is not wages in general but wages of casual workers, particularly of agricultural labourers, that have been found to correlate

very well with poverty indices<sup>1</sup>. Nonetheless, the results on poverty above sit awkwardly with the undoubted fact that an agrarian crisis (involving both large numbers of farmer suicides and starvation deaths in different parts of country) unfolded itself particularly in the period after 1997.

### **Why does poverty decline faster during 1999-2005?**

The previous section outlined some of the developments which would have crucial bearing on explaining poverty reduction. As far as poverty reduction is concerned, the only consistent story based on mutually comparable surveys and recall periods is: (1) that poverty reduced during 1993-2005, but the annual rate of decline was lower than in the previous decade of 1983-1994 and (2) that it was also low compared to annual decline between 1999-2005, implying that bulk of the decline between 1993-2005 happened in the last five years of the period concerned, with very little poverty reduction achieved between 1993-2000. Moreover, the picture emerging from EUS surveys of poverty reduction during 1999-2005, also shows that most of the poverty reduction at national level is driven by sharp poverty reduction in the states which had more than national average poverty till 1999-00<sup>2</sup>. The obvious question is what caused this high poverty reduction during 1999-2005 and whether this is real or just a statistical artifact. This becomes even more complex if juxtaposed to evidence emerging from other indicators of well-being, such as nutrition status. That is, if poverty did reduce much faster during 1999-2005 when agricultural output and wages were growing slower, why did many of these non-income indicators not improve even more in the period 1999-2005 compared to 1993-2000?

One possible answer to this puzzle is actually as old as studies on determinants of poverty. This concerns the relative price of food and cereals in particular. The impact of relative price as a variable has figured prominently in the initial debate on rural poverty in India, both independently of agricultural production and in relative significance with it<sup>3</sup>.

---

<sup>1</sup> The correlation between agricultural wages and poverty indices at state level is around 0.9 for 43<sup>rd</sup>, 50<sup>th</sup> and 55<sup>th</sup> round. (Deaton and Dreze, 2002).

<sup>2</sup> These states are Assam, Bihar, West Bengal, Madhya Pradesh and Orissa in descending order of annual percentage point poverty reduction during 1999-2005. These five states together accounted for a little over 50% of all poor in rural India.

<sup>3</sup> Saith (1981) demonstrated that while rural poverty and fluctuations in agricultural production were inversely related, fluctuations in consumer prices aggravated rural poverty. Dharam Narain in his unfinished work also argued that poverty was related with higher food prices. This specification was challenged because his use of nominal food prices as an explanatory variable was refuted by most economists who said that what really matters are relative prices, and if absolute prices need to be incorporated this should be done by considering the rate of inflation rather than price level. As Sen (1985) argues, prices contributed to rural poverty because prices received failed to catch up with prices paid as consumers of food. In other words it is relative prices of food which is usually linked to rural poverty. Srinivasan (1985) demonstrated that the number of poor is a function of agricultural output and current prices of agricultural commodities. Gaiha (1989) demonstrated that while rural poverty and agricultural production were inversely related, the effect of agricultural production in some cases were weak or absent.

This was again reiterated by Sen (1996) while explaining poverty reduction in the 1980s, particularly between 1983 and 1987-88, the later being a drought year<sup>4</sup>.

Table below gives the growth rates in consumer prices for food and non-food for rural and urban areas respectively<sup>5</sup>. The last two columns of the table give the ratio of growth rates of food group and the non-food group. Between 1993-94 to 1999-00, food prices were increasing faster than the non-food prices in rural areas for all India by 8% and this was the case for all states except Bihar, Tamilnadu, Kerala and Punjab. After 1999-00, the rate of growth of food prices was only 31% of the growth rate of non-food prices. While this was true for all states in rural areas, what is important is the fact that this ratio was lowest in Assam, Bihar, Karnataka and Madhya Pradesh, and food prices actually declined in Orissa. These states are also where bulk of the rural poor is located and it is important to note that these are precisely the States that show the sharpest reduction in poverty during 1999-2005. In fact, the fall in relative price of food is also responsible for some of these states showing higher real wage rate growth during 1999-2005. From this, one possible story emerges: that the high food price increase between 1993-94 and 1999-00 nullified much of the poverty reduction that could be expected from the improvements in wages and agricultural productivity that did occur during the period; and that, conversely, because food prices growth decelerated sharply between 1999-00 and 2004-05, there was rapid poverty reduction despite lower growth of wage rates and agricultural output.

---

The effect of price fluctuation on the other hand was consistently strong and often decisive. More specifically unanticipated inflation in an index of consumer prices aggravated rural poverty.

<sup>4</sup> Sen argues that despite the weakening of the link with agriculture, rural areas were the beneficiaries of both increased agricultural prices as well as cheaper food prices. The price of agricultural goods in the 1980s were rising faster than the general price level, reversing the earlier trend of movement of terms of trade against agriculture. But the fact that this increase in agricultural prices did not have unbearable inflationary implications was partly because of the weakening of the link between agriculture and non-agriculture and partly because of the intervention of the State through the public distribution system. As a result, even though agricultural prices as a whole increased faster than the general price levels, cereals prices increased slower so that it was possible for real wages to rise without increasing product wages correspondingly (Sen, 1996; Sen and Ghosh, 1993). Coupled with increased income from increased agricultural prices, it also meant that the farming community remained insulated from the instability of agricultural production even during years of monsoon failure.

<sup>5</sup> All India commodity weights have been used to arrive at non-food growth figures. Use of state level commodity weights will not change these results significantly.



Table 19  
CAGR of consumer prices by groups

	1993-94 to 1999-00			1999-00 to 2004-05			FGR/NFGR	
<b>CPIAL</b>	Food	Non-food	Total	Food	Non-food	Total	93-99	99-04
Andhra Pradesh	8.80	7.21	8.38	1.93	3.37	2.30	1.22	0.57
Assam	8.10	7.57	7.98	0.40	4.14	1.26	1.07	0.10
Bihar	7.39	7.70	7.47	0.71	4.00	1.54	0.96	0.18
Gujarat	8.25	6.87	7.92	1.61	5.14	2.46	1.20	0.31
Jammu & Kashmir	9.10	7.24	8.66	0.54	4.59	1.51	1.26	0.12
Karnataka	9.58	6.84	8.85	0.26	4.79	1.47	1.40	0.05
Kerala	6.64	10.59	7.66	3.16	-0.15	2.27	0.63	-20.52
Madhya Pradesh	8.50	7.32	8.25	0.36	3.74	1.08	1.16	0.10
Maharashtra	9.52	6.76	8.87	2.13	5.40	2.88	1.41	0.39
Orissa	9.13	7.93	8.85	-0.87	3.71	0.25	1.15	-0.24
Punjab	7.11	7.86	7.29	2.40	3.19	2.60	0.91	0.75
Rajasthan	7.78	6.62	7.50	1.26	5.11	2.23	1.18	0.25
Tamil Nadu	7.57	9.92	8.24	2.20	4.29	2.84	0.76	0.51
Uttar Pradesh	7.96	5.96	7.51	1.42	5.22	2.28	1.33	0.27
West Bengal	7.99	7.30	7.80	0.81	4.64	1.87	1.09	0.17
All India	8.15	7.57	8.01	1.30	4.22	2.03	1.08	0.31
<b>CPIIW</b>								
Andhra Pradesh	8.48	8.32	8.64	2.64	7.27	3.49	1.02	0.36
Assam	8.59	8.34	8.37	1.00	4.28	1.95	1.03	0.23
Bihar	7.96	7.28	8.06	2.08	10.33	4.06	1.09	0.20
Gujarat	8.18	8.41	8.45	2.12	5.48	2.67	0.97	0.39
Haryana	7.98	9.62	8.46	2.60	7.18	3.73	0.83	0.36
Jammu & Kashmir	9.28	10.58	9.72	5.19	7.83	5.68	0.88	0.66
Karnataka	9.11	8.18	9.12	2.20	7.76	3.22	1.11	0.28
Kerala	8.98	9.37	9.25	2.63	6.22	3.22	0.96	0.42
Madhya Pradesh	7.08	6.83	7.21	3.01	6.31	3.62	1.04	0.48
Maharashtra	8.33	9.74	8.60	2.89	8.34	4.29	0.85	0.35
Orissa	7.58	7.99	8.00	2.22	5.49	2.66	0.95	0.40
Punjab	7.16	7.86	7.35	2.29	6.41	3.24	0.91	0.36
Rajasthan	8.80	8.30	8.76	1.96	5.06	2.62	1.06	0.39
Tamil Nadu	8.20	8.44	8.41	1.81	7.45	2.97	0.97	0.24
Uttar Pradesh	8.16	7.66	8.26	2.48	5.68	3.02	1.07	0.44
West Bengal	9.35	9.24	9.44	1.27	3.76	1.73	1.01	0.34
All India	8.22	8.47	8.41	2.53	6.88	3.43	0.97	0.37

This story can be buttressed by some aspects of the regional pattern of poverty reduction found above and relating this to patterns in employment growth which did improve sharply between 1999-00 and 2004-05. For example, although most non-poverty

indicators do not indicate any marked improvement in this period compared to 1993-2000, it does appear that the few success stories were also in states which have traditionally had higher than national average poverty with states like Bihar (including Jharkhand), Assam, Orissa, Chhatisgarh and West Bengal not only doing better on wage rate growth but also on various other indicators. Their performance on total SDP growth and agricultural SDP growth is also better in this period compared to the previous period<sup>6</sup>. On employment, Orissa shows the highest non-farm diversification followed by Haryana, Bihar and Madhya Pradesh. On unemployment, which is generally increasing, West Bengal shows absolute decline followed by Gujarat and Assam. Bihar shows unemployment rising by only 1.4% during 1999-05 compared to 5.1% during 1993-00. Since most of these states are also states with higher than national poverty, an improvement in these states also drives down national poverty at a faster rate. These regional patterns could have reinforced the effect of lower relative food price.

The third important factor which emerges from the analysis of employment trends is the fact that this period of faster poverty reduction is also characterised by a very high growth rate of employment. Although, most of this growth in employment is in the form of informal and unorganised sector employment, this in turn did imply that the number of workers per household increased during the same period. The increase in number of workers per household did have the impact that even though wages were growing slower, the total earning capacity of households increased during the same period, and therefore total earnings of the households. Table below gives the average household size and average number of workers by deciles of consumption expenditure.

Table 20  
Household Size and Workers by Income Deciles

	1999-00				2004-05			
	Rural		Urban		Rural		Urban	
Deciles of MPCE	HHS	WKR	HHS	WKR	HHS	WKR	HHS	WKR
Lowest 10%	5.95	2.37	6.09	2.00	5.87	2.39	5.91	2.13
Next 10%	5.79	2.32	5.63	1.95	5.82	2.38	5.67	2.10
Next 10%	5.49	2.28	5.32	1.83	5.55	2.39	5.26	1.98
Next 10%	5.33	2.25	5.04	1.74	5.34	2.36	4.97	1.90
Next 10%	5.19	2.25	4.72	1.68	5.16	2.32	4.72	1.79
Next 10%	5.02	2.22	4.34	1.60	4.88	2.26	4.43	1.73
Next 10%	4.78	2.19	3.99	1.50	4.63	2.22	4.08	1.65
Next 10%	4.55	2.12	3.61	1.40	4.40	2.17	3.76	1.52
Next 10%	4.20	1.97	3.37	1.38	4.11	2.11	3.50	1.47
Highest 10%	3.60	1.76	3.18	1.39	3.59	1.90	3.03	1.44
Total	4.99	2.18	4.53	1.65	4.82	2.23	4.34	1.73

<sup>6</sup> Among the states where per capita SDP growth increased during 1999-05 compared to 1993-2000, the highest increase was observed in the case of Assam, Bihar, Chhatisgarh and Orissa.

However, the rate of poverty reduction has been higher in rural areas than urban areas through-out the reform period. While this may suggest urbanization of poverty largely driven by migration, the real picture is also that the growth of employment in non-farm sector has largely been in the rural areas with relatively faster growth of wage rates than the urban areas. This is not only confirmed by the NSS, but also by the ASI and Economic census estimates. A possible reason may be the move to urban peripheries and rural areas by some of the non-farm enterprises. But again this point to the important lesson of post-reform experience in poverty reduction and that is the importance of employment generation in poverty reduction. The initial years of reform not only saw wages growing at a respectable rate of around 3% per annum, it also was witness to a relatively high rate of growth of agriculture output at around 3% per annum. While the experience in the most recent period is opposite on both counts, it did see a significantly large poverty reduction. The essential difference between these two periods was the fact that while employment grew at less than 1% per annum for most part of the 1990s, it was 2.85% during the most recent period. The relatively low rate of growth of food prices also helped, but it in no way underscores the importance of employment generation for poverty reduction.

However, although plausible, explanations such as the above cannot be totally convincing about large rural poverty reduction in a period of undoubted agrarian distress unless the necessary links are further elucidated. Till then, such explanations must remain tentative and it is also not possible to reject an alternative interpretation: that the rural poverty decline estimated above for 1999-2005 is simply a statistical artifact driven by artificially low increases in the poverty lines because of low food prices. This interpretation is likely from those who have consistently argued against the current method of poverty calculations and their argument is likely to get strengthened if, as is likely, the nutritional intake data yet to be released from the 61<sup>st</sup> round turns out to show lower real food expenditure and lower nutrient intake during 1999-2005 despite the sharp fall in real food price.

### **References:**

Deaton, Angus and Jean Dreze (2002), "Poverty and Inequality in India: A Re-examination", *Economic and Political Weekly*, Vol.37, No.36, September 7

Gaiha, Raghav (1989): 'Poverty, Agricultural Production and Prices Fluctuations in Rural India: A Reformulation', *Cambridge Journal of Economics*, 13(2) pp.333-352

Jain, Sunil, "Jobless Growth, Ha'ah", *Business Standard*, November 20, 2006

Saith, A (1981): 'Production, Prices and Poverty in Rural India', Journal of Development Studies, 17 (January)

Sen, Abhijit (1996): 'Economic Reforms, Employment and Poverty: Trends and Options,' Economic and Political Weekly, Special No, September 1996.

Sen, Abhijit and Jayati Ghosh (1993): 'Trends in Rural Employment and the Poverty-Employment Linkage', ILO - ARTEP Working Paper, International Labour Organisation, New Delhi.

Sen, Abhijit and Himanshu (2004a), "Poverty and Inequality in India- I", Economic and Political Weekly, Vol. 39, No.38, September 18

Sen, Abhijit and Himanshu (2004b), "Poverty and Inequality in India- Growing Disparities in the 1990s", Economic and Political Weekly, Vol. 39, No.38, September 25

Sundaram, K, "Employment and Poverty in India, 2000-2005", Economic and Political Weekly, July 28, 2007

Unni Jeemol and G Raveendran, "Growth of Employment (1993-94 to 2004-05): Illusion of Inclusiveness", Economic and Political Weekly, January 20, 2007